DERIVATIVE/ANTIDERIVATIVE BLOCK GAME

Learning Outcome: Practice with derivatives and antiderivatives, and being careful to pay attention to which way you are going.

Game Setup: One game board, one set of 36 derivative/antiderivative "game tile" cards (print back to back and cut apart), four sets of 24 player markers labeled "1" through "4" (print single sided and cut apart).

Game Play: Game can be played by 1 through 4 players.

1. Shuffle all game tiles and arrange on game board (see notes about LEVELS below). Players take turns declaring the answer for a card, then checking it by turning it over.
2. If the answer is correct, the answering player replaces the game card with his/her numbered player marker. If the answer is incorrect, the next player in turn claims the space.
3. Game is won when a player claims four spaces in a row, column, or diagonal.

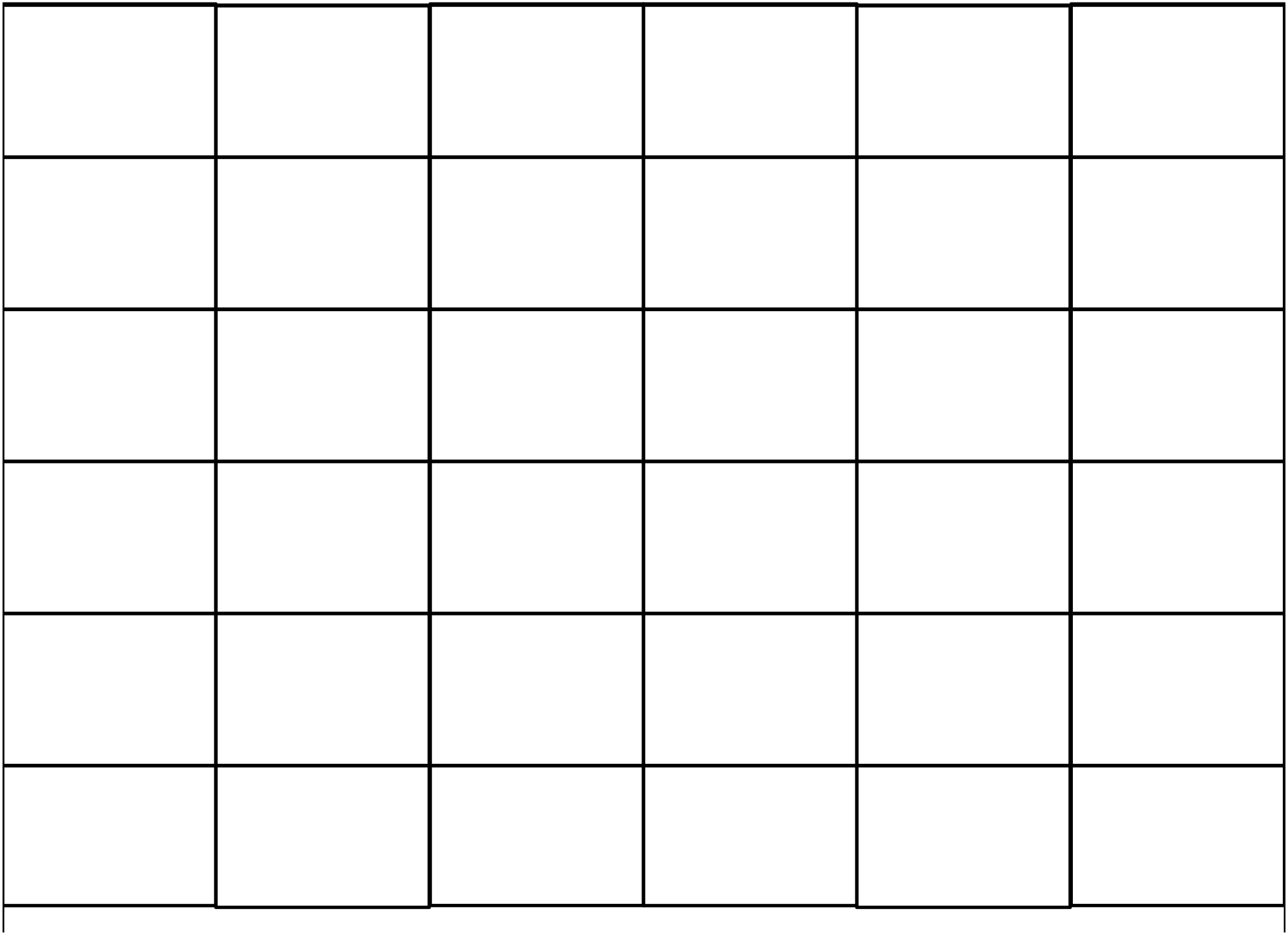
Levels:

1. Place all game tiles "find the derivative" side up.
2. Place all game tiles "find an antiderivative" side up.
3. Place game tiles so that they are mixed, some "find the derivative" side up and others "find an antiderivative" side up.

Find the derivative. $\sin x$	Find the derivative. $\cos x$	Find the derivative. $\tan x$	Find the derivative. $-\cos x$
Find the derivative. $\csc x$	Find the derivative. $\sec x$	Find the derivative. $\cot x$	Find the derivative. $-\sin x$
Find the derivative. x^3	Find the derivative. x^5	Find the derivative. x^2	Find the derivative. $2x$
Find the derivative. $\frac{x^2}{2}$	Find the derivative. $\frac{x^4}{4}$	Find the derivative. $\frac{x^3}{3}$	Find the derivative. $\frac{x^5}{5}$
Find the derivative. e^x	Find the derivative. 2^x	Find the derivative. 10^x	Find the derivative. $\ln x$
Find the derivative. $\frac{e^{2x}}{2}$	Find the derivative. $\frac{1}{2}\sin 2x$	Find the derivative. $\frac{1}{3}\tan 3x$	Find the derivative. $\frac{1}{4}\cos 4x$
Find the derivative. e^{2x}	Find the derivative. $\sin 3x$	Find the derivative. $\tan 4x$	Find the derivative. $\cos 2x$
Find the derivative. $(x+3)^4$	Find the derivative. $(2x+1)^3$	Find the derivative. $\sin(x^2)$	Find the derivative. $\sin^2 x$
Find the derivative. $x^{1/2}$	Find the derivative. x^{-2}	Find the derivative. $\frac{2}{3}x^{3/2}$	Find the derivative. $\frac{x^{-2}}{-2}$

Find an antiderivative. $\sin x$	Find an antiderivative. $\sec^2 x$	Find an antiderivative. $-\sin x$	Find an antiderivative. $\cos x$
Find an antiderivative. $-\cos x$	Find an antiderivative. $-\csc^2 x$	Find an antiderivative. $\sec x \tan x$	Find an antiderivative. $-\csc x \cot x$
Find an antiderivative. 2	Find an antiderivative. $2x$	Find an antiderivative. $5x^4$	Find an antiderivative. $3x^2$
Find an antiderivative. x^4	Find an antiderivative. x^2	Find an antiderivative. x^3	Find an antiderivative. x
Find an antiderivative. $\frac{1}{x},\ x>0$	Find an antiderivative. $10^x \ln 10$	Find an antiderivative. $2^x \ln 2$	Find an antiderivative. e^x
Find an antiderivative. $-\sin 4x$	Find an antiderivative. $\sec^2 3x$	Find an antiderivative. $\cos 2x$	Find an antiderivative. e^{2x}
Find an antiderivative. $-2\sin 2x$	Find an antiderivative. $4\sec^2 4x$	Find an antiderivative. $3\cos 3x$	Find an antiderivative. $2e^{2x}$
Find an antiderivative. $2\sin x \cos x$	Find an antiderivative. $2x\cos\left(x^2\right)$	Find an antiderivative. $6\left(2x+1\right)^2$	Find an antiderivative. $4\left(x+3\right)^3$
Find an antiderivative. x^{-3}	Find an antiderivative. $x^{1/2}$	Find an antiderivative. $-2x^{-3}$	Find an antiderivative. $\frac{1}{2}x^{-1/2}$

Antiderivative Block Game Board



1	1	1	1
1	1	1	1
1	1	1	1
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1	1	1	1
1	1	1	1
2	2	2	2
2	2	2	2
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2	2	2	2
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4	4	4	4
4	4	4	4
4	4	4	4
4	4	4	4
4	4	4	4
4	4	4	4